L'INITIATIVE
sida, tuberculose, paludisme

IMPLEMENDED BY EXPERTISE FRANCE GROUPE AFD

FUNDED AND UNDER THE SUPERVISION OF MINISTÈRE DE L'EUROPE ET DES AFFAIRES ÉTRANGÈRES
Liberté
Égalité
Fraternité

AS PART OF THE FRENCH CONTRIBUTION TO THE GLOBAL FUND

CaPThai
TB Case-Finding, Treatment and Preuention Interuention in Thailand

THE CAPTHAI PROJECT: TRANSFORMING TUBERCULOSIS CONTROL IN THAILAND THROUGH INNOVATIVE STRATEGIC PUBLIC HEALTH INTERVENTIONS

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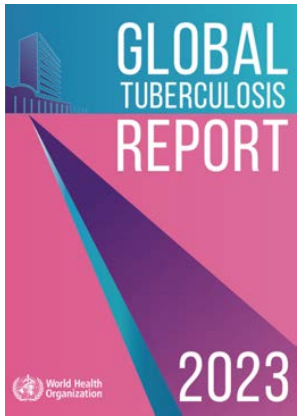
TUBERCULOSIS BURDEN

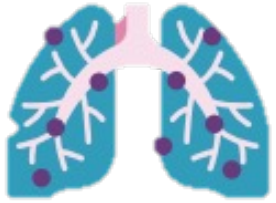
Global and situation in Thailand

Dr Phalin Kamolwat

Global Tuberculosis Report 2023

TB Incidence 133 / 100,000 pop.





In 2022, an estimated
10.6 Million people Fell ILL with TB
(9.9-11.4 Million)

Men
5.8 Million
(55%)

Women
3.5 Million
(33%)

Children
1.3 Million
(12%)

TB Mortality

1.30 Million
TB Deaths
(1.18-1.43Million)

167,000
Deaths among
People with HIV

Drug-resistant TB

410,000 Fell ILL with drug-resistant TB
(370,000-450,000)

MDR/RR-TB

176.6K Laboratory-confirmed cases
175.7K Patients started on treatment

TB/HIV

TB/HIV care in new and relapse TB patients

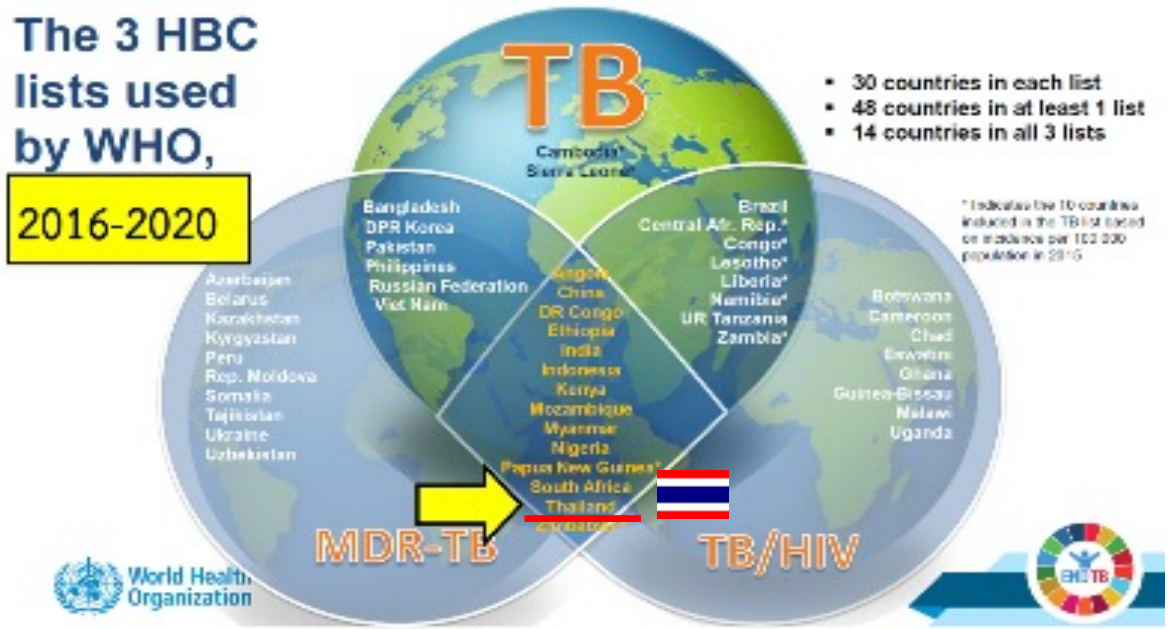
671,000
(600,000-746,000)
People living with HIV
Fell ill with TB

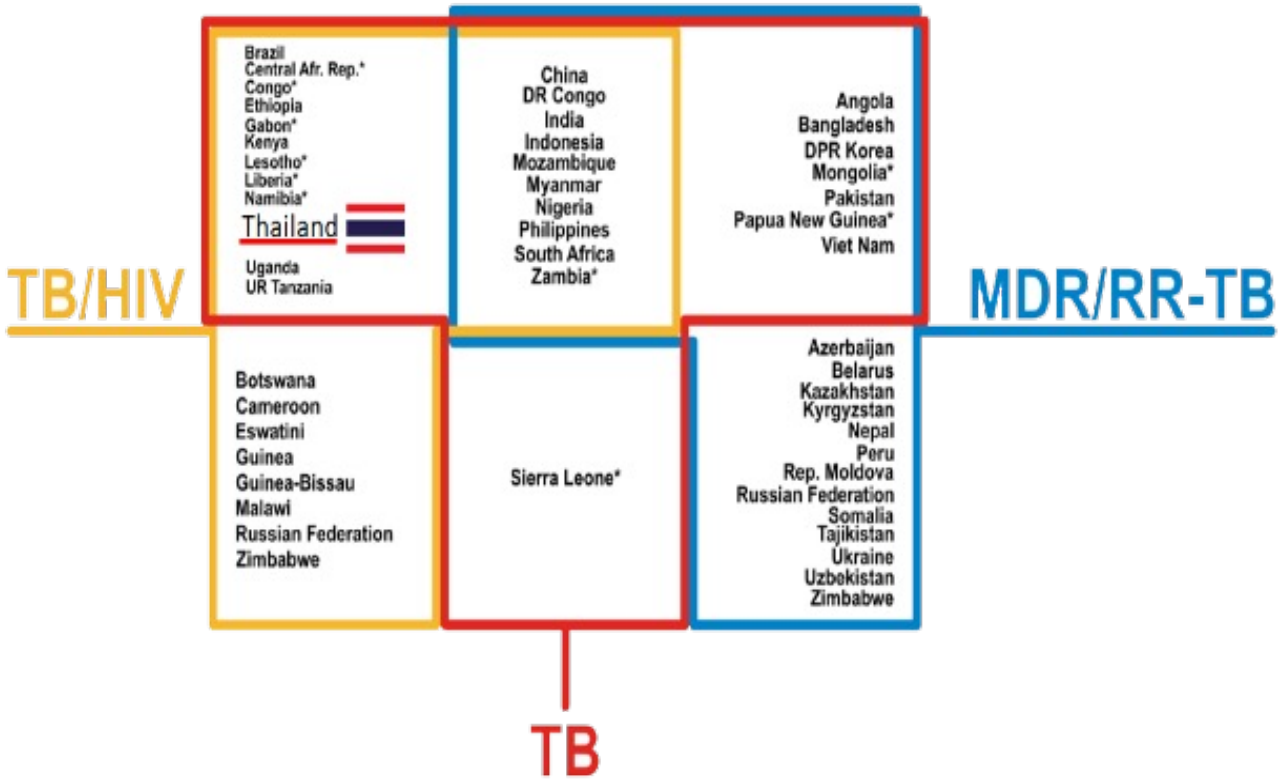
427,000
Patients with known HIV status who are HIV-positive

365,000
HIV-positive TB patients on ART

WHO global lists of high TB burden countries

2016 - 2020 → **2021 - 2025**





In year 2021 – 2025: Thailand <u>was removed</u> from the list of <u>the 30 high MDR/RR-TB</u> burden countries.

Sustainable Development Goals: SDGs

SDG3: Good Health and Well-being

THAILAND: SDGs Global rank 41 of 166

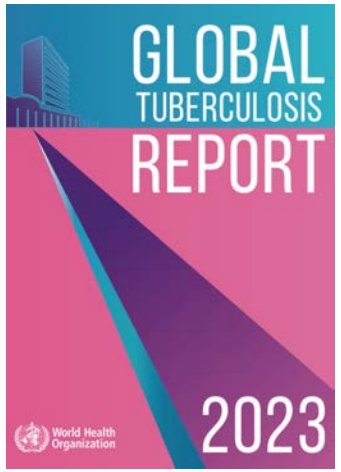
Indicator	Green	Yellow	Orange	Red	
Incidence of tuberculosis (per 100,000 pop.)	≤ 10	10<x≤42.5	42.5<x≤75	>75	153 (2018)
Traffic death (per 100,000 pop.)	≤ 8.4	8.4<x≤12.6	12.6<x≤16.8	>16.8	32.7 (2016)
Adolescent fertility rate (birth per 1,000 adolescent females aged 15-19)	≤ 25	25<x≤37.5	37.5<x≤50	>50	44.9 (2017)
Age-standardized death rate attributable to household air pollution and ambient air pollution (per 100,000 pop.)	≤ 18	18<x≤84	84<x≤150	>150	61 (2016)
Life expectancy at birth (years)	≤ 80	80<x≤75	75<x≤70	>70	75.5 (2016)

SDGs index In Thailand

SDG3 – Good Health and Well-Being				
Maternal mortality rate (per 100,000 live births)	37	2017	●	↑
Neonatal mortality rate (per 1,000 live births)	5.3	2019	●	↑
Mortality rate, under-5 (per 1,000 live births)	9.0	2019	●	↑
Incidence of tuberculosis (per 100,000 population)	150.0	2019	●	→
New HIV infections (per 1,000 uninfected population)	0.1	2019	●	↑
Age-standardized death rate due to cardiovascular disease, cancer, diabetes, or chronic respiratory disease in adults aged 30–70 years (%)	14.5	2016	●	↑
Age-standardized death rate attributable to household air pollution and ambient air pollution (per 100,000 population)	61	2016	●	●
Traffic deaths (per 100,000 population)	32.2	2019	●	→
Life expectancy at birth (years)	77.7	2019	●	→
Adolescent fertility rate (births per 1,000 females aged 15 to 19)	44.7	2018	●	↗
Births attended by skilled health personnel (%)	99.1	2016	●	↑
Surviving infants who received 2 WHO-recommended vaccines (%)	96	2019	●	↑
Universal health coverage (UHC) index of service coverage (worst 0–100 best)	80	2017	●	↑
Subjective well-being (average ladder score, worst 0–10 best)	6.0	2019	●	↑

Thailand Tuberculosis Situation 2022

TB Incidence 155 / 100,000 pop.



111,000 Fell ILL with TB

(87,000-138,000)

72,274
People with TB notified
(new and relapse)

38,726
People not notified
Or not diagnosed

Men 68%

Women 31%

Children 1%

TB Mortality

13,700 TB Deaths

(11,400-16,200)

2,100 Death among
People with HIV

TB Treatment

TB Treatment coverage

65%

2025 90%
End TB Operational target

Treatment success rate

85%

Diagnosis

Use of WHO-recommended rapid diagnostics

60% People newly diagnosed with TB using WHO-recommended rapid diagnostics

Thailand Tuberculosis Situation 2022

Drug-resistant TB

2,700 Fell ILL with drug-resistant TB

(1,500-3,800)

MDR/RR-TB

875 Laboratory-confirmed cases

874 Patients started on second-line treatment

TB/HIV

9,200

(6,200-13,000)

People living with HIV Fell ill with TB

TB test for people living with HIV

5,340

Notified among **9200** people living with HIV

4,689

Notified and Put on antiretroviral treatment

TB preventive treatment

15%

Household contacts of bacteriologically-confirmed TB case on preventive treatment

4,934

People (age ≥ 5 years) household contacts of bacteriologically-confirmed TB cases on TB preventive treatment

11,511

Children (age < 5 years) household contacts of bacteriologically-confirmed TB cases on TB preventive treatment

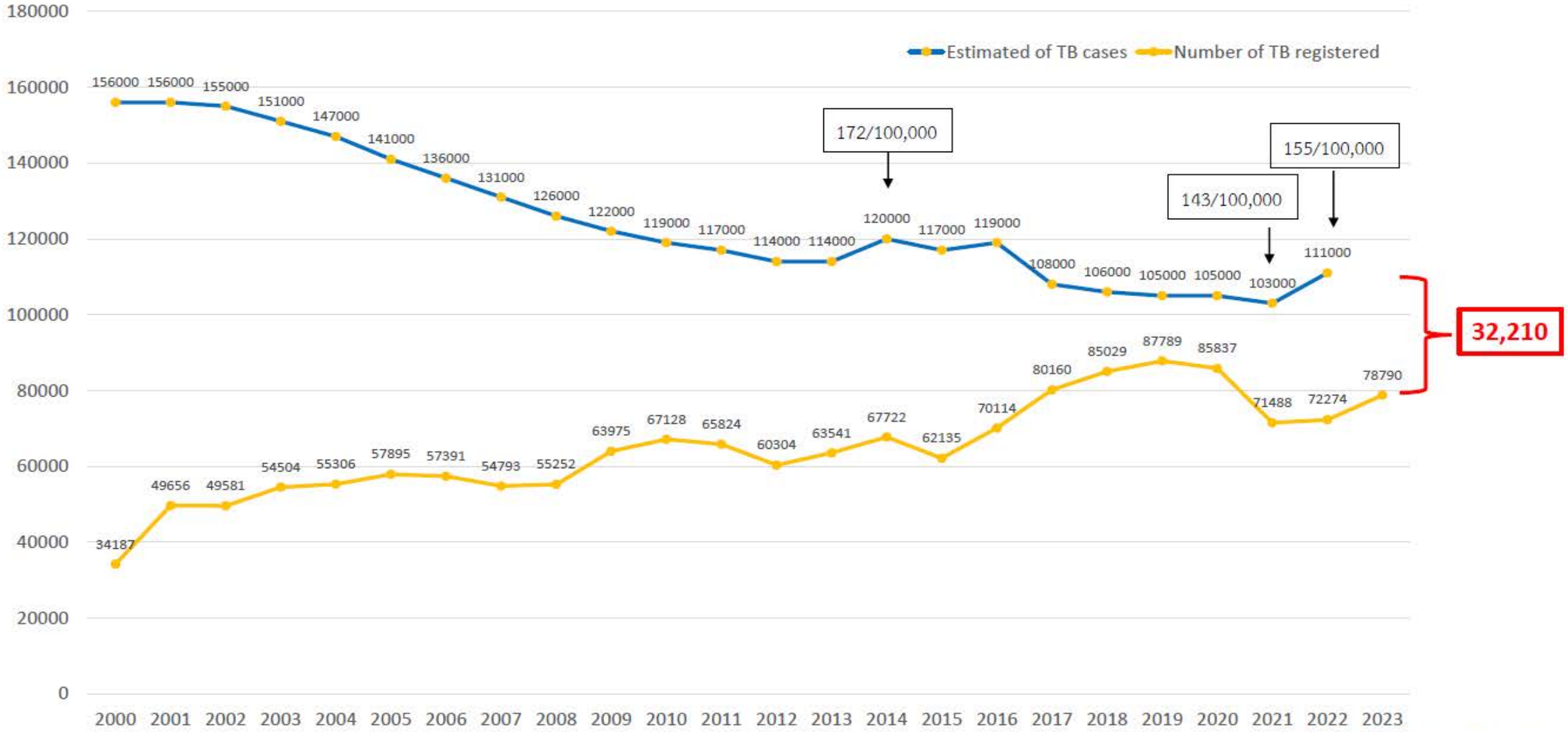
TB Catastrophic costs

30%

(26-34)

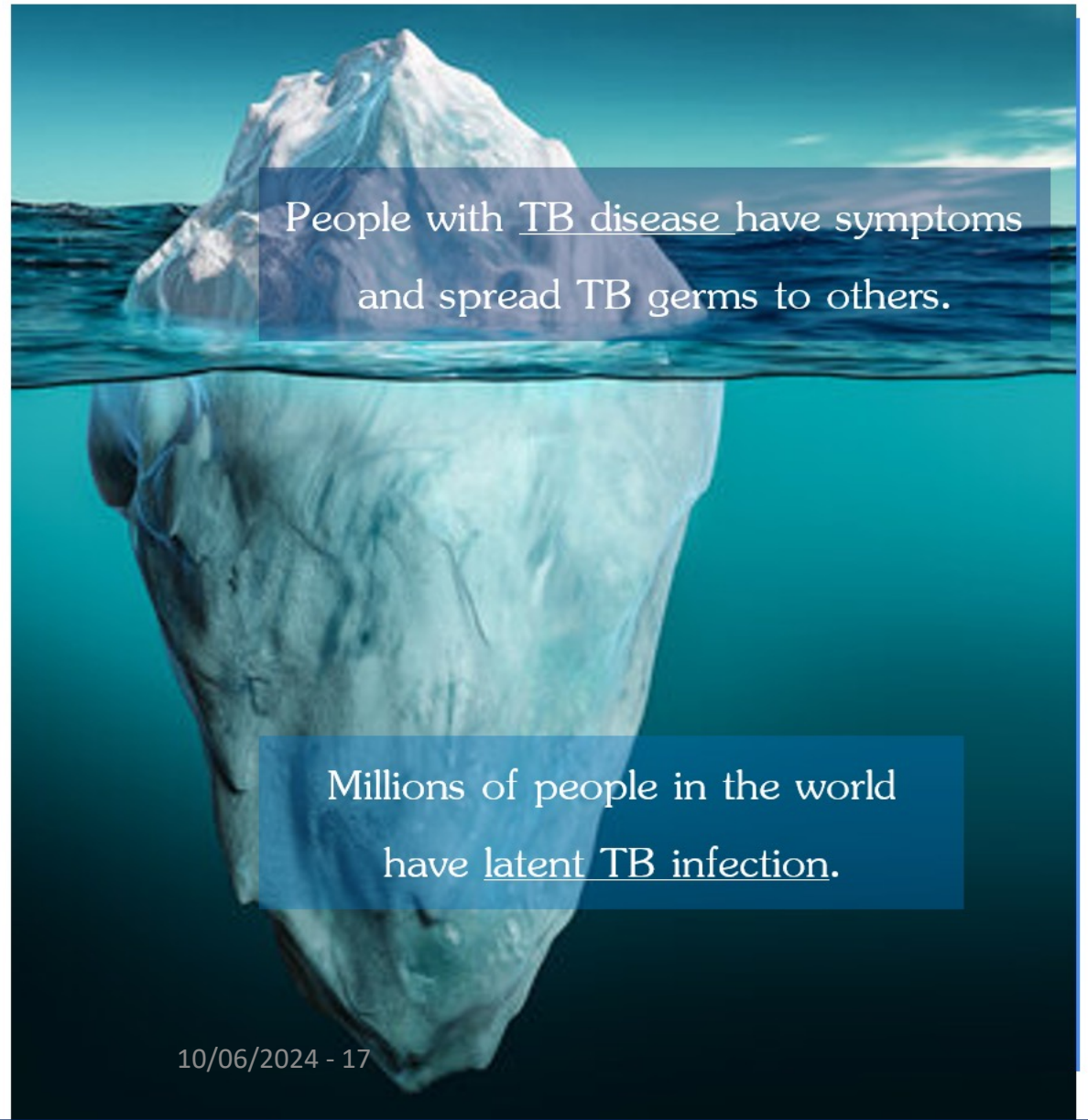
TB patients facing catastrophic total costs year of survey: 2020

Estimated and number of TB cases, 2000-2023



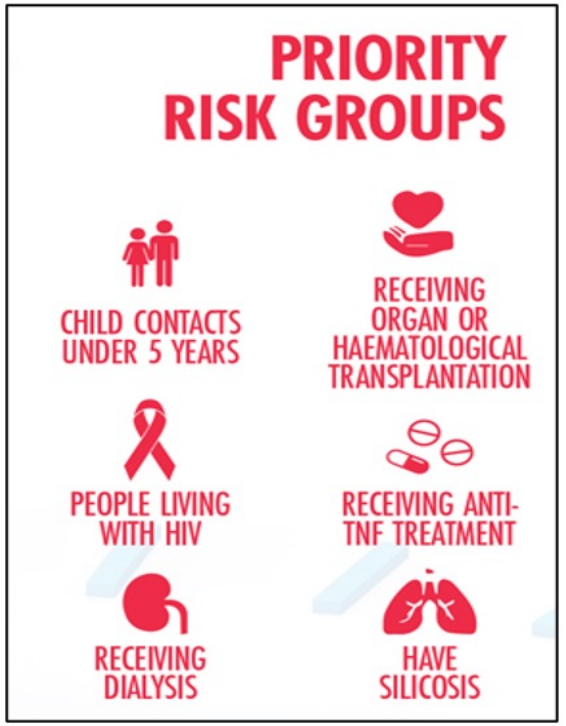
Source : 2016 – 2022, WHO, Global TB Report
2023, Division of TB, NTIP, March 6, 20

Tuberculosis disease: Only the tip of the Iceberg



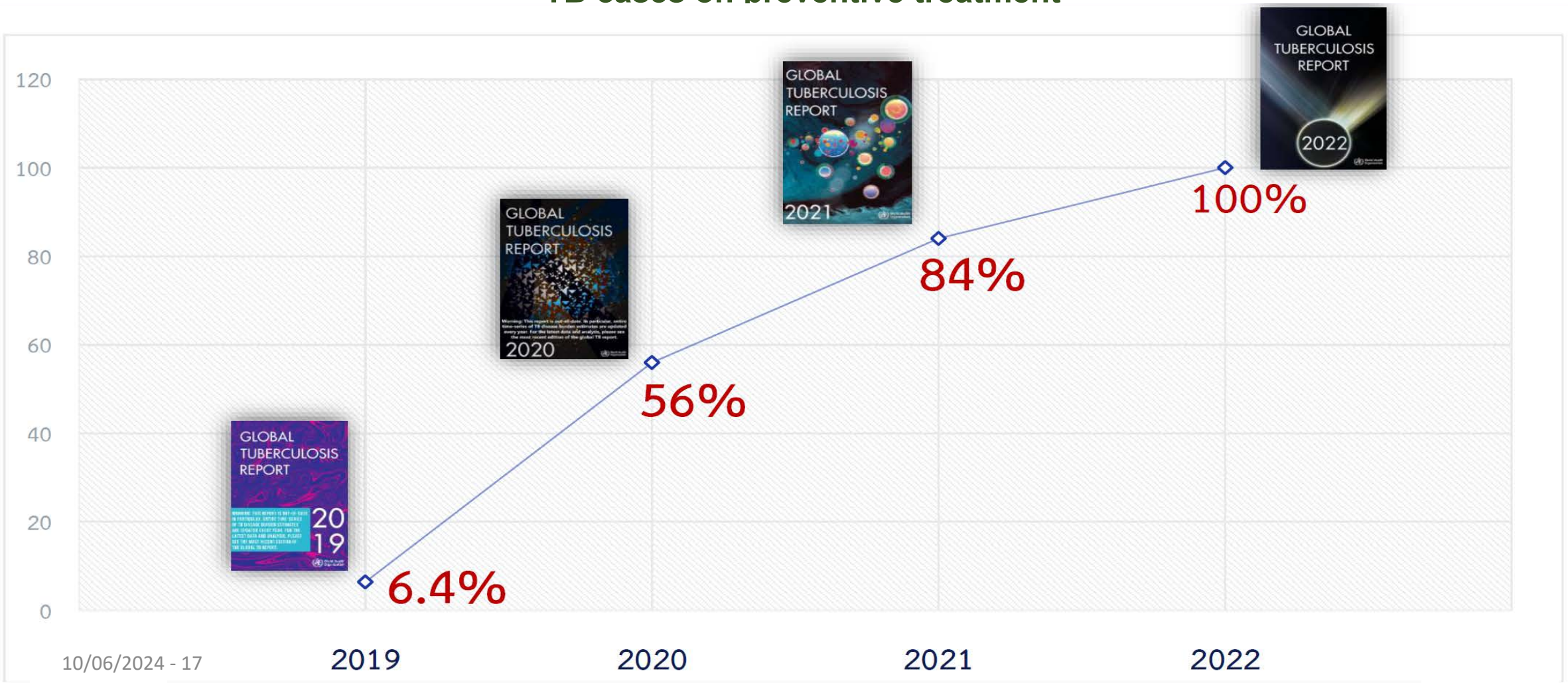
1/4 of the global population is infected with latent TB

10-15% will develop to active TB

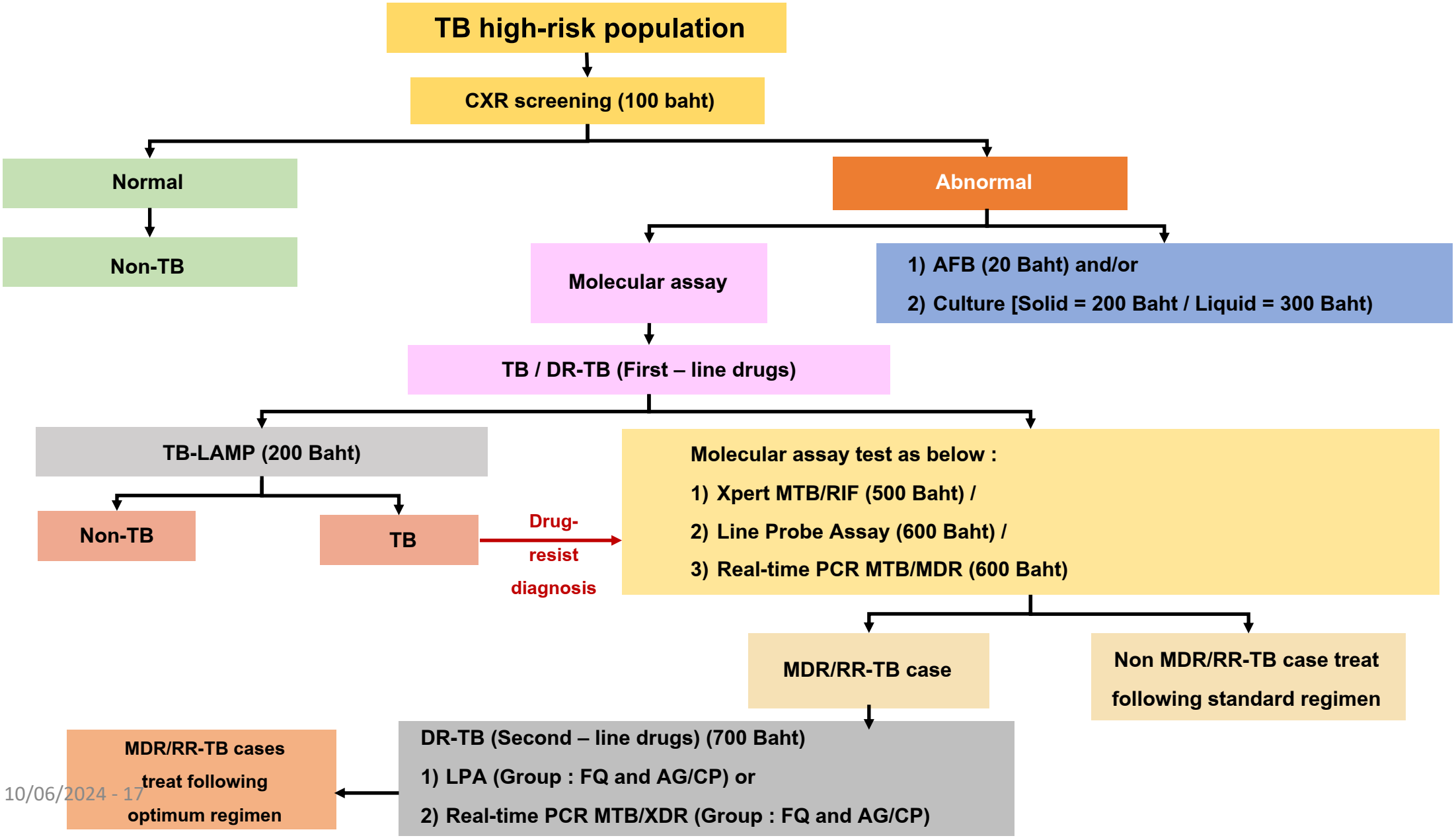


Global TB Report: TPT Thailand

Percentage of household contacts among children aged < 5 years old of bacteriologically confirmed TB cases on preventive treatment



Benefit of health security system for TB high-risk population in 2023



Laboratory network for TB diagnostic

1. Culture 56 Units

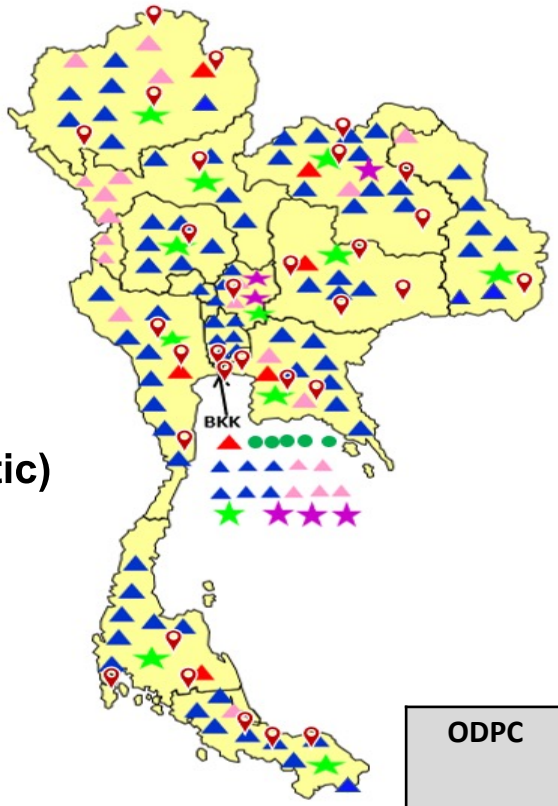
2. Phenotypic DST

FLD 35 Units, SLD 14 Units

3. Xpert 77 Provinces

160 Units, 236 Machines (TB diagnostic)

4. LPA 19 Units (FL&SL DST)



19 LPA

GF 12 , non GF 7

236 Xpert Assay

GF 174, non GF 62

227 machines,

4 module

9 machines,

16 module

191 Xpert 6-color

45 Xpert 10-color

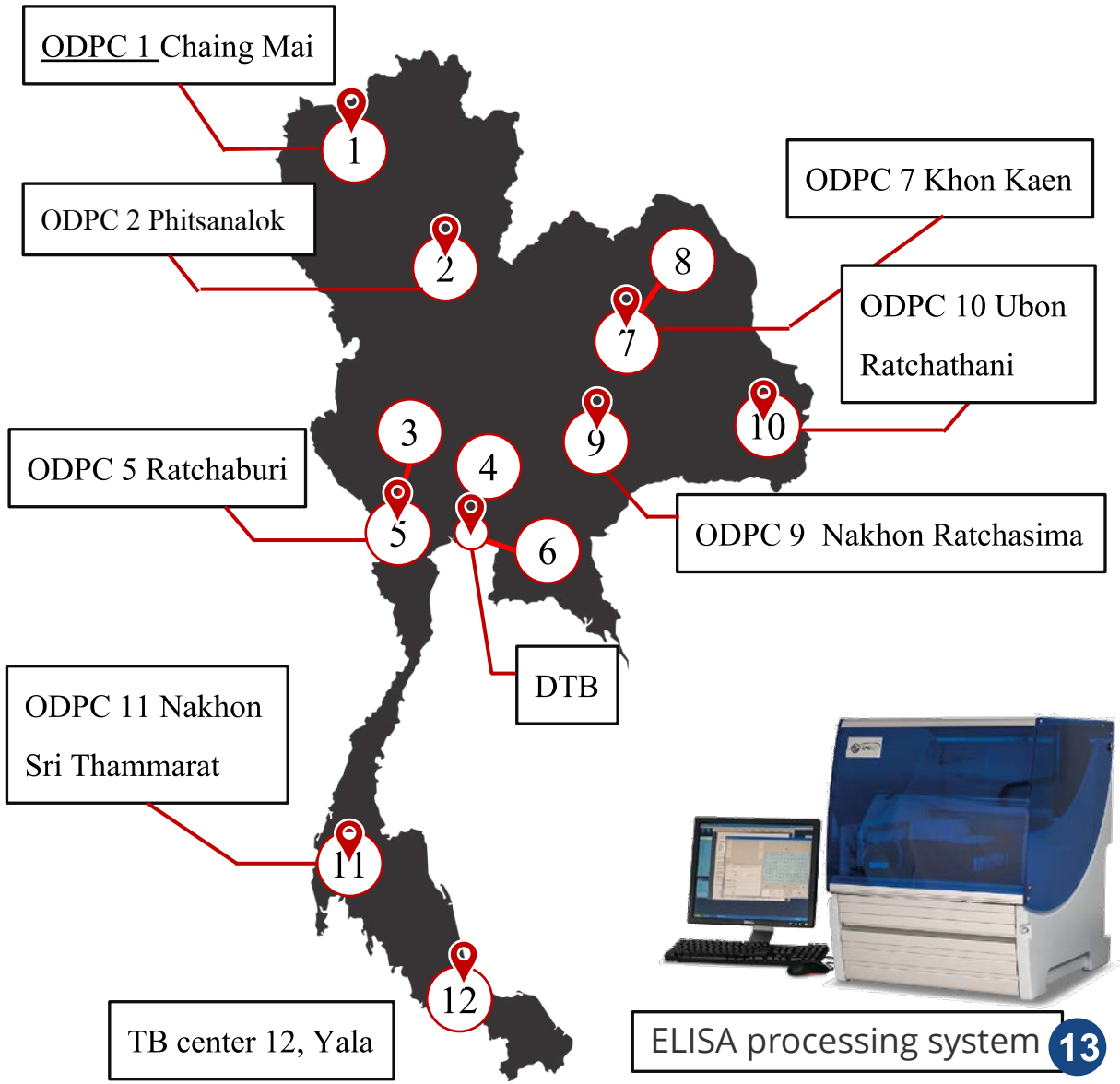
ODPC	Xpert MTB/RIF Ultra	Xpert MTB/XDR	LPA
ODPC 1	17	5	1
ODPC 2	15	1	1
ODPC 3	7	1	1
ODPC 4	20	3	3
ODPC 5	16	3	1
ODPC 6	14	3	1

ODPC	Xpert MTB/RIF Ultra	Xpert MTB/XDR	LPA
ODPC 7	11	3	1
ODPC 8	11	3	2
ODPC 9	12	3	1
ODPC 10	8	3	1
ODPC 11	9	3	1
ODPC 12	11	2	1
BKK	41	13	4

IGRA center

IGRA Center 9 site

- ODPC 1 Chaing Mai
- ODPC 2 Phitsanalok
- ODPC 5 Ratchaburi
- ODPC 7 Khon Kaen (ODPC 7+8)
- ODPC 9 Nakhon Ratchasima
- ODPC 10 Ubon Ratchathani
- ODPC 11 Nakhon Sri Thammarat
- ODPC 12 Songkhla (TB center 12, Yala)
- DTB (ODPC 3, 4, 6, Bangkok)



ELISA processing system

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RESEARCH PROJECT

The method and the strategic pack

Dr Tamara Tovar Sanchez

International collaboration of CaPThai project

CaPThai
TB Case-Finding, Treatment and Preuention Interuention in Thailand

A research grant from : EXPERTISE FRANCE

Signature of a MOU for the CaPThai project

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London School of Hygiene and Tropical Medicine

Dr Jintana Ngamvithayapong- Yanai

TB/HIV Research Foundation, Thailand

RESEARCH PROJECT





Objective: To evaluate whether a public health intervention package focusing on increased active case-finding and uptake of TB preventive therapy in households of newly detected TB cases in Thailand can be efficient in improving TB control.

METHODOLOGY

PRAGMATIC PHASE IV RANDOMIZED CONTROLLED TRIAL

Design:

Stepped-Wedge Cluster-Randomized Trial (SW-CRT)

Population:

Households (HH) contacts of newly bacteriologically confirmed TB case living in the same household for the last 3 months

Cluster:

20 provincial hospitals with TB notification >150 cases/year

Sequence:

4 clusters (5 hospitals) switching from control to intervention every 3 months

***Analysis**:*

Effectiveness, adherence and safety in intervention (Active Case-Finding strategies and TPT shortest courses) vs control phase (Current Standard of Care)

	month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Facility #	Sequence																		
1																			
2																			
3																			
4																			
5	1																		
6																			
7																			
8																			
9																			
10	2																		
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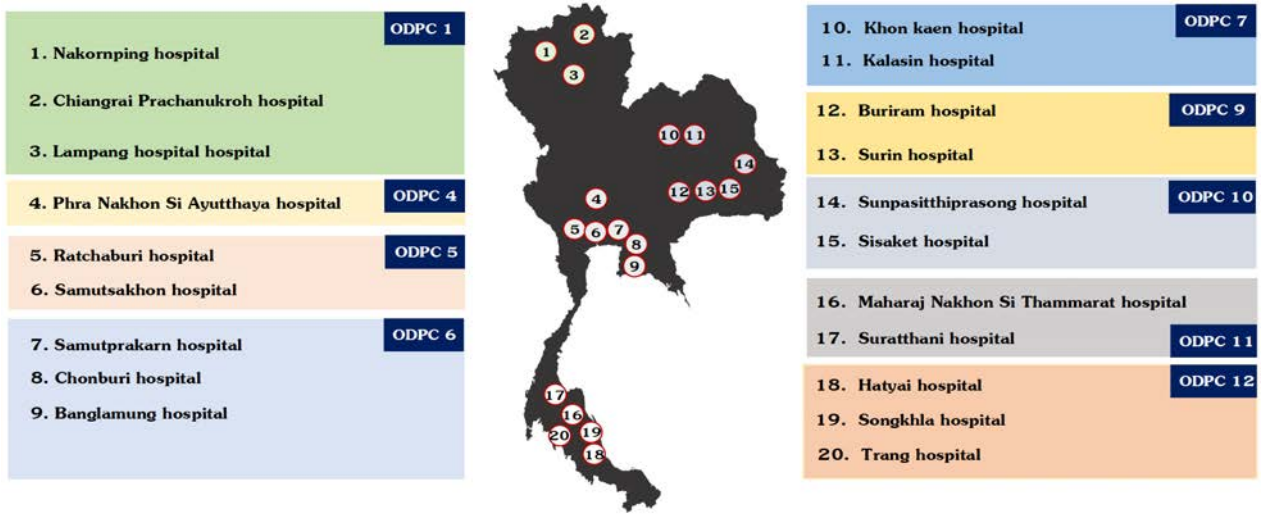
20	4																		



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CONCLUSION

Public Health Impact

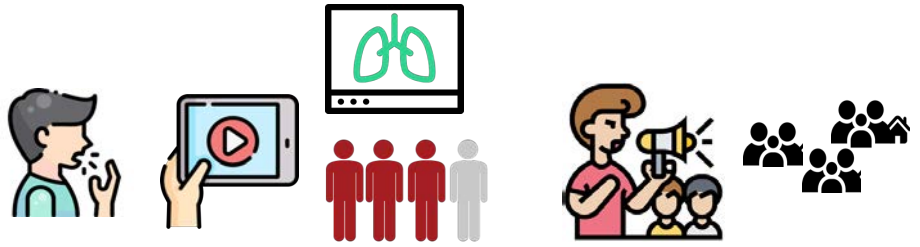
Project current status

TB PREVENTION MODEL FOR THAILAND AND BEYOND

The present study protocol incorporates pragmatic design features and includes patient-centred care outcomes, whilst respecting the rigor of clinical research, to support the decision-making to implement a public health strategic pack.

The long-term benefits and scale-up at national level of ACF strategies and TPT shortest regimens, directly benefiting all HHC of active TB cases detected within the frame of the study amongst nationals and migrant populations, PLWHIV, adults and children.

HEALTH SYSTEM CAPACITY-BUILDING



Activity of CaPThai project

CaPThai
TB Case-Finding, Treatment and Preuention Interuention in Thailand

Site Assessment visits

Pilot Phase

Trial initiation
May 7th 2024

Thank you

For your attention